

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017195**Date Inspected:** 07-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai,China**CWI Name:** Mr.Tian Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Nagalingam Pandaram Pillai was present during the times noted above for observations relative to the work being performed.

In process Inspection

Bay #1

This QA inspector observed the following work in progress:

FCAW welding of weld joint No: 20TR2-032-011 located on OBG Segment Traveler rail. Welder is identified as #203710. ZPMC QC is identified as Mr. Xiang feng feng. Welding was performed with the weld repair report B-WR-14303 and UT Report B787-UT-14178. The welding variables recorded by QC appeared to comply with the WPS-345-FCAW-1G(1F)-Repair-1.

Bay #2

This QA Inspector observed the following work in progress:

FCAW in the 2G position for the OBG Segment 13, weld No: VP3014-001-002. The welder is identified as #045280. ZPMC QC is identified as Mr. Zhu Jun. The welding variables recorded by QC appear to comply with WPS-B-T-2232-TC-U4b-F.

This QA Inspector observed the following work in progress:

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FCAW in the 2G position for the OBG Segment 13, weld No: VP3014-001-002. The welder is identified as #045280. ZPMC QC is identified as Mr. Zhu Jun. The welding variables recorded by QC appear to comply with WPS-B-T-2232-TC-U4b-F.

This QA Inspector observed the following work in progress:

FCAW in the 2F position for the OBG Segment 13, weld No: SA3423-001-027/028. The welder is identified as #207465. ZPMC QC is identified as Mr. Zhu Jun. The welding variables recorded by QC appear to comply with WPS-B-T-2132-3.

During Quality Assurance Inspection of fabrication in Bay#2 this Caltrans Quality Assurance (QA) Inspector discovered the following issue:

- Base metal repair being performed by ZPMC personnel without Engineers approval.
- The base metal repairs were being performed in the area of the cope holes at the top of the stiffener pass through slots in the web plates.
- ZPMC is building up the inside of all the cope areas to accommodate a drawing revision.
- Additionally ZPMC did not appear to prepare the edge of the material in a manner suitable for building up the edges as specified in ABF submittal 200.
- The members are identified as SA3177A, SA3177B, SA3179A, SA3179B, SA3178A, SA3178B, SA3158A and SA3177B.
- ZPMC personnel were performing the weld repairs per Weld Repair Report (WRR) B-WR14606.
- The Longitudinal Diaphragm components are located in Bay 2.

This Quality Assurance (QA) Inspector wrote an Incident Report for base metal repairs were being performed in the area of the cope holes at the top of the stiffener pass through slots in the web plates. Please reference the Incident Report # 04-0120F4_TL-15_B286_09-07-10_Buttering_Without_CWR. For further information, please see the attached pictures.

Bay #3

This QA Inspector observed the following work in progress:

FCAW in the 2F position for the OBG Segment 13, weld No: FB3262-001-023. The welder is identified as #044830. ZPMC QC is identified as Mr. Zhang yaxu. The welding variables recorded by QC appear to comply with WPS-B-T-2132-3.

Magnetic Particle Testing:-

Bay #3

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated an MT report for this date. The member is identified as OBG Segment Floor Beam. The weld designation reviewed is as follows:

FB3146-001-92,97,82,22,23,60,63,7,8,26,27,148,149,9,10,37,38,40,75,76,49,50.

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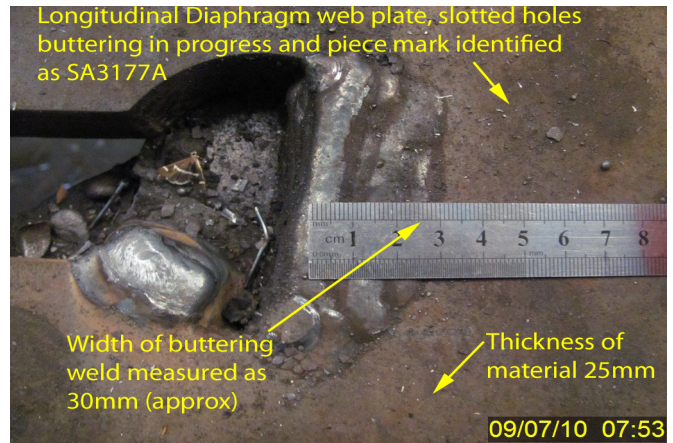
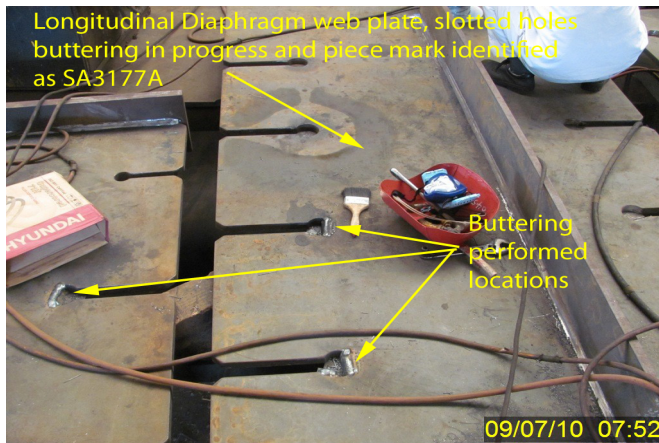
Bay #4

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated an MT report for this date. The member is identified as OBG Segment Travelers Rail. The weld designation reviewed is as follows:

20TR2-013-020,017,011

11TR2-007-015,016,008,009,011,012.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No Relevant Conversation.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Pillai,Pandaram

Quality Assurance Inspector

Reviewed By: McClendon,Timothy

QA Reviewer